Indiana Design Manual Rewrite Implementation Plan

Purpose:

The purpose of this implementation plan is to present in detail the organizational and decision making structure, schedule of activities, focus team memberships and team focus areas.

Reasons for the Indiana Design Manual Rewrite:

The current version of the Indiana Design Manual was majority written during the 1990's and is comprised of 87 chapters. Since its completion, many events have taken place which has impacted the validity of the current version. They are:

- 1. New INDOT organizational structure established in 2005.
- 2. New and/or revised national design policy and guidance.
- 3. New emphasis on a strong project management system.
- 4. New focus on "value added" projects designing "good" projects rather "great" projects.
- 5. A general perception that transportation projects are conservatively designed.
- 6. Dedicated staff within the Production Management Division is insufficient to effectively manage and update the current version of the Indiana Design Manual due to its size and context.

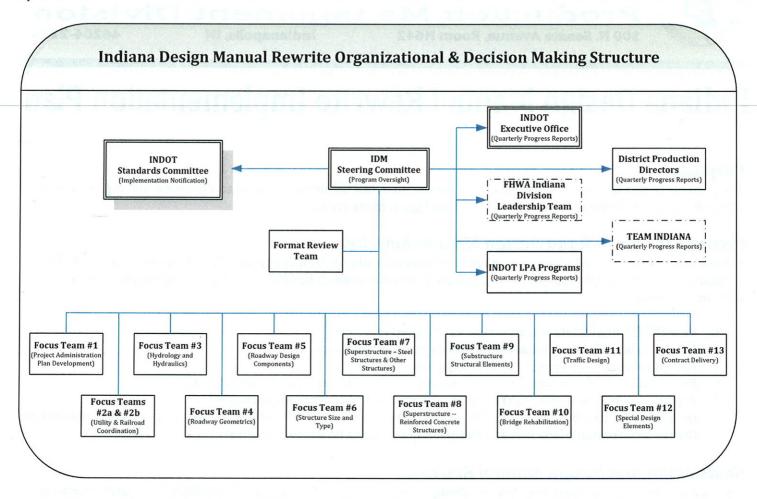
Goals of Indiana Design Manual Rewrite:

The measurement of success of this Indiana Design Manual Rewrite will not be fully realized unless the following goals are achieved.

- 1. Complete the Rewrite within a two year period (completion by December 31, 2010).
- 2. A Manual which is restructured and reduced in scope in order for sustainability with current staff resources.
- 3. A Manual which maximizes the opportunity for design flexibility and value added decision making.
- 4. A Manual which references foundation design manuals and guidance and presents only Indiana specific minimum factors and design criteria ranges.
- 5. A Manual which is written as a policy guide rather than a textbook.
- 6. Incorporate AASHTO "Guidelines for Geometric Design of Very Low-Volume Local Roads.
- 7. Incorporate and or reference all current applicable guideline documents.
- 8. A Manual which is interactive and user friendly to the maximum extent.
- 9. A Manual which is from a transportation designer perspective.

Organizational & Decision Making Structure:

The chart below illustrates the overall organizational and decision making structure for the Indiana Design Manual Rewrite.



1. Steering Committee:

The Steering Committee serves as the management / oversight team which will hold but not limited to monthly meetings to obtain scope and progress updates from the focus team leaders. The team also serves as the lead daily decision making authority to the focus teams and communication interface with the INDOT Executive Office, INDOT Standards Committee and FHWA Indiana Division. The Committee also reviews all documents prior to approval for publishing. The membership of the Steering Committee is:

Gary Mroczka – Director, Production Management Division, INDOT (Chair)
Anne Rearick – Manager, Office of Structural Services, INDOT
John Wright – Manager, Office of Roadway Services, INDOT
Brad Steckler – Director, Program Engineering Division, INDOT
Shakeel Baig - Production Director, Crawfordsville District, INDOT
Ernie Stoops – Design Manager, Vincennes District, INDOT
Dennis Lee – Transportation Engineer, FHWA Indiana Division
Keith Hoernschemeyer – Bridge Engineer, FHWA Indiana Division
Troy Jessup – RW Armstrong

Resource (Schedule Analyst):

Phil Kuntz - Janssen and Spaans Engineering

Kate Francis - Operational Analyst, Production Management Division, INDOT

Task Schedule:

ID	Standar Committee	04.4	Flatab		Q1 0	,		Q2 09	,		Q3 09			Q4 09			Q1 10			Q2 10			Q3 10			Q4 10)
טו	Steering Committee	Start	Finish	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	Implementation Plan Development	2/2/2009	3/31/2009																								
2	Implementation Plan Approval	3/31/2009	4/17/2009											60								0.5					
3	Kick-Off Meeting	4/13/2009	4/17/2009				1																				
4	Monthly Oversight Meetings	5/20/2009	12/31/2010		nue.					152		BNE		exa.								MAR.	000				
5	Quarterly Meetings / Reports	5/20/2009	12/31/2010								•			•									•				
6	INDOT Executive Progress Update	10/13/2009	10/12/2010										V												7		
7	Fall 2009 Meeting / Report	10/13/2009	10/13/2009	S.	7								•														
8	Spring 2010 Meeting / Report	4/13/2010	4/13/2010																•								
9	Fall 2010 Meeting / Report	10/12/2010	10/12/2010							16	624								100				Tors.		•		

2. Format Review Team:

The purpose of the Format Review Team is to establish the Manual's format which all Focus Teams will use and will review all drafts for compliance. The team will also serve as a technical resource for the Focus Teams as well as a communication resource with internal and external customers. The team will investigate opportunities to incorporate a Google Search Engine and hyperlinks (to other manuals, forms, standards, specification, etc.) into the document. The team leader will report back to the Steering Committee within 60 days. The membership of the Format Review Team is:

Anthony Uremovich, Standards Team Leader, INDOT Office of Structural Services Susan Hines, INDOT Office of Structural Services Dan McQueen, INDOT Office of Structural Services

Task Schedule:

		0	F	Q109	Q2 09	Q3 05	9	(24 09		Q1 10		Q2	10		Q3 10			24 10	
ID	Format Review Group	Start	Finish	Jan Feb Mar	Apr May Jun	Jul Aug	Sep	Oct	Nov D	ec Jan	Feb A	far A	pr M	ay Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	Kick-Off Meeting	4/13/2009	4/17/2009		0															
2	Monthly Oversight Meetings	5/20/2009	12/31/2010	A 10 A										9.50						
3	Develop Standard Format	4/20/2009	7/2/2009																	
4	Investigate User Interactive Tools and Applications	4/20/2009	7/31/2009																	
5	Part 1 Chapter Reviews	11/16/2009	12/15/2009																	
6	Part 2 Chapter Reviews	5/17/2010	6/18/2010	100000																
7	Part 3 Chapter Reviews	11/15/2010	12/17/2010			1						ni.								

3. Focus Teams:

The thirteen Focus Teams are responsible for the subject matter research, technical writing and training / implementation within one of the thirteen focus areas. These focus areas include:

- 1. Project Administration and Plan Development Procedures
- 2. Utility and Railroad Coordination
- 3. Hydrology and Hydraulics
- 4. Roadway Geometrics
- 5. Roadway Design Components
- 6. Structure Size and Type
- 7. Superstructure -- Steel Structures and Other Structures
- 8. Superstructure -- Reinforced Concrete Structures
- 9. Substructure Structural Elements and Retaining Walls
- 10. Bridge Rehabilitation
- 11. Traffic Design

- 12. Special Design Elements
- 13. Contract Delivery

Each Focus Team will be comprised of generally five or more members led by a team leader. The team leader is to plan and organize team activities and report progress to the Steering Committee on a monthly basis. Every other month, each Team Leader will provide progress orally to the Steering Committee on a rotational basis, even numbered teams during even months and odd numbered teams during odd numbered months. For the periods between oral presentations, a written report shall be submitted to the Steering Committee reporting progress. All Team Leaders are expected to attend all monthly meetings so consist and accurate communication is transmitted to all teams by the Steering Committee.

Focus Team Membership / Focus Areas:

1. Project Administration and Plan Development Procedures:

Team Leader: Russ Brittain, INDOT Office of Roadway Services

INDOT: Kathy Smutzer, Office of Roadway Services INDOT: Ron McCaslin, Office of Structural Services

INDOT: Paul Schmidt, Office of Mobility and Congestion

INDOT District: Mike Eubank, Crawfordsville

INDOT: Jodi Coblentz, Local Programs

ACEC: Melissa Effinger, Janssen and Spaans Engineering

ACEC: Mary Jo Hamman - Baker ACEC: Cristine Klika, PB Americas

FHWA Indiana Division: Bren George, Transportation Engineer FHWA Indiana Division: Eryn Fletcher, Transportation Engineer

Focus Areas:

- Outlines designer interface with the Planning Scoping process
- Value added decision making structure more focused on project intent.
- New LPA Process.
- Electronic Record Management System (ERMS)
- Project Submittal Requirements (Current Chapter 14)
- Value Engineering process.
- Design Exception process
- Risk Management / Risk Assessment
- Standardized Plan Sets
- New public involvement procedures / CSS

Deliverable Schedule:

ID	Focus Group #1	04-4	Finish		Q1 09			Q2 09			Q3 09		1	Q4 09			Q1 10		Q2	10		Q3 10			Q4 10	
טו	Project Administration & Plan Development Procedures	Start	Finish	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb A	far Ap	or Ma	y Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	Kick-Off Meeting	4/13/2009	4/17/2009				1			No.																
2	Monthly Oversight Meetings	5/20/2009	1/29/2010						THE REAL PROPERTY.												6	1				
3	Research and Reconnaissance	4/20/2009	6/19/2009					DE																		
4	Detail Schedule of Tasks / Refined Focus Areas	4/20/2009	7/10/2009																							
5	Chapter Outline	6/22/2009	8/21/2009																							
6	Content Development	7/13/2009	11/20/2009								9.02															
7	Chapter(s) Review / Revisions	11/23/2009	12/31/2009																							
8	Chapter(s) Approved for Publishing	1/20/2010	1/20/2010													•										

2a. Utility Coordination:

Team Leader: Matt Thomas, Utility-Railroad Manager, Office of Real Estate

INDOT: Joe Gunderson, Utility Engineer

INDOT: Mike Buening, Utility – Railroad Engineer INDOT District: Larry Loveall, Greenfield District

INDOT District: George Moffat, Crawfordsville District

ACEC: Deborah Porter, Clark Dietz

ACEC: Ken Slaninka, TBE

FHWA Indiana Division: Bren George, Transportation Engineer

Focus Areas:

- Incorporate new business process / practices brought about with the promulgation of the new Indiana Administrative Rule and the new PDP.
- Revisit Utility Accommodations policy (if applicable).
- Revisit and update process for Extraordinary Cost Requests (if applicable).
- Revise District v. Central Office responsibilities and relationships.
- Utility Investigation and Relocation Oversight Decision Making Process
- Standard Agreements
- Betterment
- Website development

Deliverable Schedule:

10	Focus Group #2	04-4	Cialab		Q10	9		Q2 09		(23 09			Q4 09			Q1 10			Q2 10			Q3 10			Q4 10	
ID	Utility and Railroad Coordination	Start	Finish	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	Kick-Off Meeting	4/13/2009	4/17/2009				1																				
2	Monthly Oversight Meetings	5/20/2009	1/29/2010																	C)							
3	Detail Schedule of Tasks / Refined Focus Areas	4/20/2009	7/10/2009		1							Se															
4	Chapter Outline	6/22/2009	8/21/2009	-2																							
5	Content Development	7/13/2009	11/20/2009																		1234						
6	Chapter(s) Review / Revisions	11/23/2009	12/31/2009													Sy											
7	Chapter(s) Approved for Publishing	1/20/2010	1/20/2010													•		A Since									

2b. Railroad Coordination:

Team Leader: Matt Thomas, Utility-Railroad Manager, Office of Real Estate

INDOT: Fred Hohl, Railroad Engineer

INDOT: Tom Rueschhoff, Utility - Railroad Engineer

INDOT: Doug Gannaway, Railroad Engineer

INDOT District: George Moffat, Crawfordsville District ACEC: Kurt Fowerbaugh, Shrewsberry & Associates

FHWA Indiana Division: Bren George, Transportation Engineer

Focus Areas:

- Update Railroad Coordination process
- Railroad Structures
- Standard Agreements
- Website
- Railroad Herald Standard Sheets

Deliverable Schedule:

ID	Focus Group #2	Start	Finish		Q1 09		N	Q2 09			Q3 09			Q4 09			Q1 10			Q2 10			Q3 10			24 10
טו	Utility and Railroad Coordination	Start	rinisti	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov Dec
1	Kick-Off Meeting	4/13/2009	4/17/2009				1																			
2	Monthly Oversight Meetings	5/20/2009	1/29/2010											72/3	1000											
3	Detail Schedule of Tasks / Refined Focus Areas	4/20/2009	7/10/2009							3						3										
4	Chapter Outline	6/22/2009	8/21/2009																			6				
5	Content Development	7/13/2009	11/20/2009								war.		100					0.11								
6	Chapter(s) Review / Revisions	11/23/2009	12/31/2009														No.									
7	Chapter(s) Approved for Publishing	1/20/2010	1/20/2010			y z										•										

3. Hydrology and Hydraulics:

Team Leader: Bill Schmidt, Hydraulics, Office of Structural Services

INDOT: Dale Sedler, Hydraulics, Office of Structural Services

INDOT: Shahriar Shahnaz, Hydraulics, Office of Structural Services

INDOT: John Bartolo, Hydraulics, Office of Structural Services

ACEC: Rick Rampone, HNTB Corporation

ACEC: Lenny Noens

ACEC: Jamie Stetzel, Bollinger, Lach & Assoc.

FHWA Resource: Keith Hoernschemeyer, Bridge Engineer

Focus Areas:

- Investigate the opportunities of systematic cost reductions due to over-design by current guidance.
- DNR Modeling Process
- Small Structures (Structures <20' span)
- Storm Sewer Design / Stormwater Storage Facilities
- Stormwater Treatment and Discharge

Deliverable Schedule:

	Focus Group #3	01-4	Fields		Q1 09	,		Q2 09		Q	3 09			Q4 09			Q1 10		0	22 10			Q3 10			Q4 10
ID	Hydraulics and Hydrology	Start	Finish	Jan	Feb	Mar	Apr	May	un	Jul /	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov Dec
1	Kick-Off Meeting	4/13/2009	4/17/2009				1							7								SX				
2	Monthly Oversight Meetings	5/20/2009	8/27/2010		10, 3														SIDE							
3	Research and Reconnaissance	4/20/2009	6/19/2009											590												
4	Detail Schedule of Tasks / Refined Focus Areas	4/20/2009	7/10/2009]				10 TO												
5	Chapter(s) Outline	6/22/2009	8/21/2009										14													
6	Content Development (Hydraulics)	7/13/2009	11/20/2009					PART A				(VA)	(0)													
7	Chapter(s) Review / Revisions (Hydraulics)	11/23/2009	12/31/2009													1										
8	Chapter(s) Approved for Publishing (Hydraulics)	1/20/2010	1/20/2010													•										
9	Research and Reconnaissance (Erosion Control)	1/4/2010	2/19/2010																							
10	Content Development (Erosion Control)	2/8/2010	5/14/2010																							
11	Chapter(s) Review / Revisions (Erosion Control)	5/17/2010	6/18/2010																1							
12	Chapter(s) Approved for Publishing (Erosion Control)	7/14/2010	7/14/2010																			•				

4. Roadway Geometrics:

Team Leader: Mohammad Bari, INDOT Office of Roadway Services

INDOT: Susan Gilbert, Office of Roadway Services

INDOT: Richard VanCleave, Office of Roadway Services INDOT District: Asfahan Khan, Crawfordsville Design

ACEC: Kevin Rearick, RW Armstrong

ACEC: Julie Thurman, Janssen and Spaans Engineering

ACEC: Ron Nordmeyer, Schneider Corporation

FHWA Indiana Division: Tony Perkinson, Transportation Engineer FHWA Indiana Division: Dennis Lee, Transportation Engineer

Focus Areas:

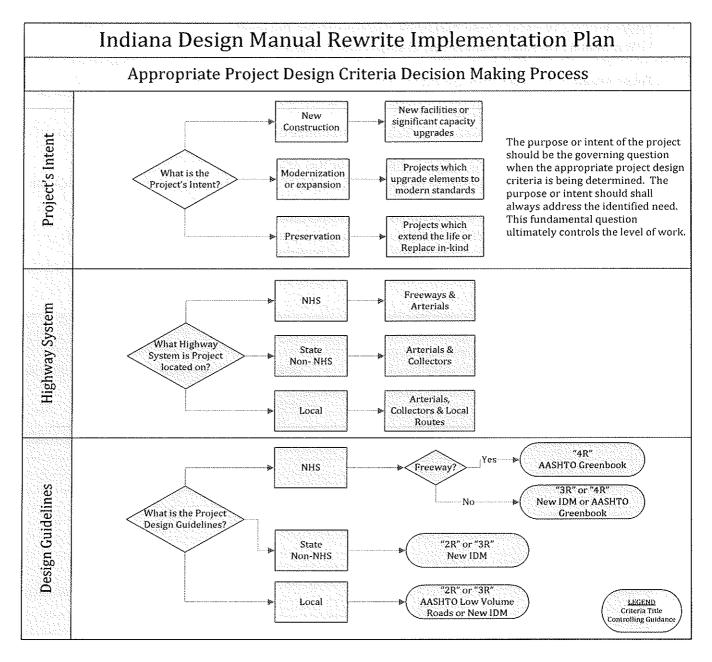
- New project design criteria decision making structure.
- Critical design elements.
- Restructuring of all Geometric Tables to maximize design flexibility opportunities by use of ranges.
- Review the value of railing offset.
- Review the value of paving to railing face in-lieu of earth.
- Realign Geometric Tables to be aligned with AASHTO Greenbook by functional classification.
- Incorporate three road systems (NHS, State non-NHS and Local).
- Combine clear zone, obstruction free and appurtance free zone.
- Simplify geometric criteria decision making structure (NHS, State non-NHS and Local).
- Review the possibility of reducing the use of paved shoulders greater than 4' paved.
- Cable rail guidance.

Deliverable Schedule:

ID	Focus Group #4	Start	Finish	Q1 09	Q2 09		Q3 09		Q4 09		Q1 10		Q2 10		Q3	10	(24 10	
טו	Roadway Geometrics	Start	rinish	Jan Feb Mar	Apr May	Jun	Jul Aug :	Sep O	at Nov De	c Jan	Feb Mai	Apr	May	Jun	Jul A	g Sep	Oct	Nov D	ec Jar
1	Kick-Off Meeting	4/13/2009	4/17/2009		1														
2	Monthly Oversight Meetings	5/20/2009	1/31/2011			10.00									93			NG.	
3	Research and Reconnaissance	4/20/2009	6/19/2009																
4	Detail Schedule of Tasks / Refined Focus Areas	4/20/2009	7/10/2009			over 1													
5	Chapter(s) Outline	6/22/2009	8/21/2009																
6	Identification / Development of Quick Impact Items	7/13/2009	8/14/2009																
7	Production Technical Memorandum – Quick Items	8/19/2009	8/19/2009				•												
8	Content Development (Part 1)	7/13/2009	11/20/2009																
9	Chapter(s) Review / Revisions (Part 1)	11/23/2009	12/31/2009																
10	Chapter(s) Approved for Publishing (Part 1)	1/20/2010	1/20/2010				NAC S			•									
11	Research and Reconnaissance (Part 2)	1/4/2010	2/19/2010			1000													
12	Content Development (Part 2)	2/8/2010	5/14/2010																
13	Chapter(s) Review / Revisions (Part 2)	5/17/2010	6/18/2010																
14	Chapter(s) Approved for Publishing (Part 2)	7/14/2010	7/14/2010												•		The second		
15	Research and Reconnaissance (Part 3)	7/6/2010	8/13/2010		No.									-					
16	Content Development (Part 3)	8/2/2010	11/12/2010				446									20.5			
17	Chapter(s) Review / Revisions (Part 3)	11/15/2010	12/17/2010																
18	Chapter(s) Approved for Publishing (Part 3)	1/5/2011	1/5/2011		NO FEET OF THE														•

Project Design Criteria Decision Making Structure:

The following table represents the decision making process for the development of the appropriate project design criteria for INDOT or LPA Federal-aid transportation projects. When establishing the appropriate design criteria for a project, the starting and fundamental question should be "What's the project's intent?" between the designer, project manager and the owner office. Then once the need and purpose is established, the decision making process continues by determinations of the 1) highway system; 2) functional classification; and then finally the 3) design guidance.



5. Roadway Design Components:

Team Leader: Peter Yao, INDOT Office of Roadway Services

INDOT: Shariq Husain, Office of Roadway Services INDOT: Yadu Shah, Office of Roadway Services

INDOT District: Mike Eubank, Crawfordsville District

ACEC: Bill Hawkins, Strand

ACEC: Greg Rominger, Burgess & Niple ACEC: Gary Simmons, Palmer Engineering

FHWA Indiana Division: Tony Perkinson, Transportation Engineer FHWA Indiana Division: Dennis Lee, Transportation Engineer

Resource: Rick Phillabaum, INDOT Environmental Services

Focus Areas:

- Interchanges (Traditional and Newer Types)
- Ramp Geometric Design Criteria
- Pedestrian / Multi-use Trails / Sidewalks
- Design consistency between INDOT Standards and design vehicles
- Consistency with INDOT Drive Permit Manual
- ADA Compliance
- S-Line Stop Controlled Design Criteria
- Erosion Control Design
- Storm Sewer Design

Deliverable Schedule:

	Focus Group #5				Q1 09			Q2 09		Q3	09		Q.	4 09		Q1	10	Q	2 10			Q3 10		q	24 10
ID	Roadway Design Components	Start	Finish	Jan	Feb	Mar	Apr	May Ju	in	Jul A	ug Se	p Oa	t A	lov D	ec Jai	Fe	b Mar	Apr I	Мау	Jun	Jul	Aug	Sep	Oct /	Nov Dec
1	Kick-Off Meeting	4/13/2009	4/17/2009				1																		
2	Monthly Oversight Meetings	5/20/2009	8/27/2010							542															
3	Research and Reconnaissance	4/20/2009	6/19/2009																					7. 1	
4	Detail Schedule of Tasks / Refined Focus Areas	4/20/2009	7/10/2009																						
5	Chapter(s) Outline	6/22/2009	8/21/2009																						
6	Content Development (Part 1)	7/13/2009	11/20/2009				1	100				NO.													
7	Chapter(s) Review / Revisions (Part 1)	11/23/2009	12/31/2009					7 40 -	Na.	O.														A	
8	Chapter(s) Approved for Publishing (Part 1)	1/20/2010	1/20/2010					100		Sil					•						M				
9	Research and Reconnaissance (Part 2)	1/4/2010	2/19/2010					Section .		381														3	
10	Content Development (Part 2)	2/8/2010	5/14/2010													C									
11	Chapter(s) Review / Revisions (Part 2)	5/17/2010	6/18/2010																						
12	Chapter(s) Approved for Publishing (Part 2)	7/14/2010	7/14/2010							N. S. W.											•				

6. Structure Size and Type:

Team Leader: Niru Shah, INDOT Office of Structural Services

INDOT: Pradeep Desai, Office of Structural Services

ACEC: Steve Summerlot, Burgess & Niple ACEC: Ben Borcherding, RW Armstrong

FHWA Indiana Division: Keith Hoernschemeyer - Bridge Engineer

Focus Areas:

- Bridge Opening (Wet, dry and railroad crossings)
- Bridge Width
- Minimum / Desirable Requirements
- Design Literature
- Tiered decision making process (Not one process fits all locations)
- 3 Sided Precast Structures
- Shop Drawing Approval Process

Deliverable Schedule:

ID	Focus Group #6	Start	Finish	Q1 09	Q2 09	Q3 09	Q409	Q1 10	Q2 10	Q3 10	Q4 10
טו	Structure Size and Type	Start	Fillion	Jan Feb Mar	Apr May Jun	Jul Aug Sep	Oct Nov Dec	Jan Feb Mar	Apr May Jun	Jul Aug Sep	Oct Nov Dec
1	Kick-Off Meeting	4/13/2009	4/17/2009		1	100,200				100	
2	Monthly Oversight Meetings	5/20/2009	8/27/2010	alched	dell'						
3	Research and Reconnaissance	4/20/2009	6/19/2009					A10 2/10	malaken	4.2.	
4	Detail Schedule of Tasks / Refined Focus Areas	4/20/2009	7/10/2009					100			
5	Chapter(s) Outline	6/22/2009	8/21/2009		- 1				4.12 1041		
6	Content Development (Part 1)	7/13/2009	11/20/2009		Name of the	- Established					
7	Chapter(s) Review / Revisions (Part 1)	11/23/2009	12/31/2009								
8	Chapter(s) Approved for Publishing (Part 1)	1/20/2010	1/20/2010					•			
9	Research and Reconnaissance (Part 2)	1/4/2010	2/19/2010								
10	Content Development (Part 2)	2/8/2010	5/14/2010	70.424		-150525					
11	Chapter(s) Review / Revisions (Part 2)	5/17/2010	6/18/2010							Server and S	
12	Chapter(s) Approved for Publishing (Part 2)	7/14/2010	7/14/2010							•	

7. Superstructure -- Steel Structures and other Structures:

Team Leader: Naveed Burki, INDOT Office of Structural Services

INDOT: Phil Smock, Office of Structural Services ACEC: Sean Porter, Parsons Transportation ACEC: Burleigh Law, HNTB Corporation ACEC: Mike McCool, Beam Longest and Neff

FHWA Indiana Division: Keith Hoernschemeyer - Bridge Engineer

Focus Areas:

- Seismic
- Wood
- INDOT AASHTO Code Interpretation
- Design Literature
- Pedestrian / Trail Structures over Roadways

Deliverable Schedule:

	Focus Group #7			Q1 09	Q2 09	Q3 09	Q4 09		Q1 10	Q2	2 10		Q3 10		Q4 10
ID	Superstructure – Steel Structures and Other Structures	Start	Finish	Jan Feb Mar	Apr May Jun	Jul Aug S	p Oct Nov	Dec Jan	Feb Mar	Apr M	lay Jun	Jul	Aug	Sep Oc	Nov De
1	Kick-Off Meeting	4/13/2009	4/17/2009		0										
2	Monthly Oversight Meetings	5/20/2009	8/27/2010												
3	Research and Reconnaissance	4/20/2009	6/19/2009												
4	Detail Schedule of Tasks / Refined Focus Areas	4/20/2009	7/10/2009				S-100 100								
5	Chapter(s) Outline	6/22/2009	8/21/2009		1										
6	Content Development (Part 1)	7/13/2009	11/20/2009												
7	Chapter(s) Review / Revisions (Part 1)	11/23/2009	12/31/2009							6 - 4					
8	Chapter(s) Approved for Publishing (Part 1)	1/20/2010	1/20/2010					•							
9	Research and Reconnaissance (Part 2)	1/4/2010	2/19/2010			1000	1000								
10	Content Development (Part 2)	2/8/2010	7/16/2010												
11	Chapter(s) Review / Revisions (Part 2)	7/19/2010	8/20/2010												
12	Chapter(s) Approved for Publishing (Part 2)	9/1/2010	9/1/2010						ALL TO				•		

8. <u>Superstructure -- Reinforced Concrete Structures:</u>

Team Leader: Randy Strain, INDOT Office of Structural Services

INDOT: Matt Starkey, Office of Structural Services INDOT: Joe Talago, Office of Structural Services

ACEC: Mike Halterman, USI

ACEC: Brian Slagle, Janssen and Spaans Engineering FHWA Indiana Division: Keith Hoernschemeyer – Bridge Engineer

Focus Areas:

- Bridge Decks
- RC Slab Bridges
- Seismic
- INDOT AASHTO Code Interpretation
- Design Literature
- Vandal Fence
- Accelerated Construction Techniques: Precast Deck Panels

Deliverable Schedule:

	Focus Group #8	011			Q1 09			Q2 09			Q3 09			Q40	9		Q1 10	,		Q2 10			Q3 10			Q4 10		
ID	Superstructure – Reinforced Concrete Structures	Start	Finish	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
1	Kick-Off Meeting	4/13/2009	4/17/2009				0																					
2	Monthly Oversight Meetings	5/20/2009	1/31/2011																								86	
3	Research and Reconnaissance	4/20/2009	6/19/2009																						110			
4	Detail Schedule of Tasks / Refined Focus Areas	4/20/2009	7/10/2009			100																						
5	Chapter(s) Outline	6/22/2009	8/21/2009																									
6	Content Development (Part 1)	7/13/2009	1/15/2010									dia 2	SEE A						AV						4			
7	Chapter(s) Review / Revisions (Part 1)	1/18/2010	2/25/2010																									
8	Chapter(s) Approved for Publishing (Part 1)	3/3/2010	3/3/2010	POR C			7-19				N. E.							•										
9	Research and Reconnaissance (Part 2)	1/4/2010	2/19/2010																									
10	Content Development (Part 2)	2/8/2010	11/12/2010																									
11	Chapter(s) Review / Revisions (Part 2)	11/15/2010	12/17/2010																									
12	Chapter(s) Approved for Publishing (Part 2)	1/5/2011	1/5/2011													76				Tiple								•

9. Substructure Structural Elements:

Team Leader: Tony Cox, INDOT Office of Structural Services

INDOT: Tam Nguyen, Office of Structural Services

INDOT: Mir Zaheer, Office of Geotechnical Engineering

ACEC: Dave McDougall, HNTB Corporation

ACEC: Mike Eichenauer, Butler Fairman & Seufert

FHWA Indiana Division: Keith Hoernschemeyer, Bridge Engineer

Focus Areas:

- LRFD Design Interface / Coordination with Office of Geotechnical Engineering
- Retaining Walls (Reinforced Concrete, MSE, Sheet Piling, other types)
- Seismic
- Normal Substructure Shapes
- Spread Footings
- Pile Foundations
- Drilled Shaft Caisson Foundations
- Crashwalls
- INDOT AASHTO Code Interpretation
- Design Literature

Deliverable Schedule:

ID	Focus Group #9	Start	Finish		Q109		Q2	09		Q3 09	,		Q4 09			21 10			Q2 10		(23 10		Q4	10	
טו	Substructure Structural Elements	Start	Finish	Jan	Feb M	far A	pr M	ay Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct N	De De	c Jan
1	Kick-Off Meeting	4/13/2009	4/17/2009				1															. 2.				
2	Monthly Oversight Meetings	5/20/2009	1/31/2011		al dis							505								1920						
3	Research and Reconnaissance	4/20/2009	6/19/2009																			300				
4	Detail Schedule of Tasks / Refined Focus Areas	4/20/2009	7/10/2009																							
5	Chapter(s) Outline	6/22/2009	8/21/2009															T.								
6	Content Development (Part 1)	7/13/2009	1/15/2010									223	(0.4	NO.												
7	Chapter(s) Review / Revisions (Part 1)	1/18/2010	2/25/2010																		in d					
8	Chapter(s) Approved for Publishing (Part 1)	3/3/2010	3/3/2010																							
9	Research and Reconnaissance (Part 2)	1/4/2010	2/19/2010																							
10	Content Development (Part 2)	2/8/2010	11/12/2010																							
11	Chapter(s) Review / Revisions (Part 2)	11/15/2010	12/17/2010	1																						
12	Chapter(s) Approved for Publishing (Part 2)	1/5/2011	1/5/2011			16																				•

10. Bridge Rehabilitation:

Team Leader: George Snyder, INDOT Office of Structural Services

INDOT: Stephanie Wagner, Office of Structural Services INDOT: Danny Wampler, Office of Structural Services

INDOT: Dan Clark, Office of Structural Services

ACEC: Seth Schickel, RW Armstrong ACEC: Janette Fulkerson, Wilbur Smith

FHWA Indiana Division: Keith Hoernschemeyer, Bridge Engineer

Focus Areas:

- Bridge Inspection
- Load Rating and Strengthening
- Widening and Replace Bridge Elements
- Railing Upgrade or Replacement
- INDOT AASHTO Code Interpretation

Deliverable Schedule:

	Focus Group #7 Superstructure – Steel Structures and Other Structures			Q1 09		Q2 09		Q3 09			Q4 09		Q1 10		Q2	Q3 10			Q4 10		
ID		Start	Finish	Jan Feb	Mar	Apr M	y Jun	Jul A	ug Sep	p Oct	Nov	Dec Ja	n Feb	Mar	Apr M	y Jun	Jul	Aug	Sep	Oct	Nov Dec
1	Kick-Off Meeting	4/13/2009	4/17/2009			1															10/4/15
2	Monthly Oversight Meetings	5/20/2009	8/27/2010								OF AN						700				
3	Research and Reconnaissance	4/20/2009	6/19/2009																		
4	Detail Schedule of Tasks / Refined Focus Areas	4/20/2009	7/10/2009	STATE OF									V.V.								
5	Chapter(s) Outline	6/22/2009	8/21/2009																		
6	Content Development (Part 1)	7/13/2009	11/20/2009						J. 1247												
7	Chapter(s) Review / Revisions (Part 1)	11/23/2009	12/31/2009																		
8	Chapter(s) Approved for Publishing (Part 1)	1/20/2010	1/20/2010				Jack.					•	>								
9	Research and Reconnaissance (Part 2)	1/4/2010	2/19/2010																25		
10	Content Development (Part 2)	2/8/2010	7/16/2010																		
11	Chapter(s) Review / Revisions (Part 2)	7/19/2010	8/20/2010																		
12	Chapter(s) Approved for Publishing (Part 2)	9/1/2010	9/1/2010							15,25								•			

11. Traffic Design:

Team Leader: Alfredo Hanza, INDOT Office of Roadway Services

INDOT: Prakash Patel, Office of Roadway Services

INDOT: Shahpor Shahbahrami, Office of Roadway Services

INDOT: Mike Holowaty, Office of Traffic Safety INDOT District: Bill Smith, Crawfordsville Traffic

IDM Rewrite Implementation Plan April 14 2009

INDOT: Joe Bruno, Office of Traffic Engineering

ACEC: Dave Henkel, RW Armstrong

ACEC: Tom Ford, Jacobs

ACEC: Mike Feltz, Major Engineering

FHWA Indiana Division: Karen Stippich, ITS / Operations Engineer

Focus Areas:

- Intersections
- Use of innovative intersection alternatives (Michigan U-turn, etc...)
- Incorporate Roundabout Intersection chapter
- Incorporate "Sign Design Guide".
- Obtain consistent statewide (all districts on the same page) design guidance for as many as possible traffic design related items.
- Revise guidance for sign lighting as a result of high reflective sheeting.
- Revisit the recommended use of signs bracketed to bridge structures.
- Revise to be aligned with current Indiana MUTCD.
- Maintenance of Traffic / TMP
- Interstate Lane Closure Policy
- Intelligent Transportation System (ITS) Design

Deliverable Schedule:

10	Focus Group #10 Traffic Design		First	Q1		Q1 09		Q2 09		Q3 09		Q4 09			Q1 10		0	Q2 10			Q3 10			Q4 10			
ID		Start	Finish	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov L	Dec
1	Kick-Off Meeting	4/13/2009	4/17/2009				1																				
2	Monthly Oversight Meetings	5/20/2009	1/29/2010					E																			
3	Research and Reconnaissance	4/20/2009	6/19/2009																								
4	Detail Schedule of Tasks / Refined Focus Areas	4/20/2009	7/10/2009																								
5	Chapter Outline	6/22/2009	8/21/2009																								
6	Content Development	7/13/2009	11/20/2009	7																							
7	Chapter(s) Review / Revisions	11/23/2009	12/31/2009											(
8	Chapter(s) Approved for Publishing	1/20/2010	1/20/2010													•											

12. Special Design Elements:

Membership of this focus group will be determined at a later date.

Focus Areas:

- Rest Areas
- Others to be determined during development of other focus areas.

13. Contract Delivery:

Team Leader: Walt Land, INDOT Office of Project Management

INDOT: Jim Brown, Office of Roadway Services

INDOT: Martha Chernet, Office of Structural Services

INDOT: Susan Languell, Contract Administration

INDOT District: Gary Bowser, Crawfordsville

ACEC: Cash Canfield, Structurepoint

ACEC: Mark Eckhert, Beam Longest and Neff

ACEC: Peter Flynn, Schneider Corporation

FHWA Indiana Division: Eryn Fletcher, Transportation Engineer FHWA Indiana Division: Tony Perkinson, Transportation Engineer Resource: Ron Heustis, INDOT Construction Management Division

Focus Areas:

- Incorporate all current checklists.
- New LPA Process.
- References to Environmental Manuals / Procedures (Permitting)
- Constructability Review Process
- Design Build Template / Process
- Environmental Commitment Database
- Cost Estimating Procedures

Deliverable Schedule:

ID	Focus Group #11 Project Contracting	Start	Cinioh	Q1 09			Q2 09			Q3 09			Q4 09			Q1 10			Q2 10			Q3 10			Q4 10		
טו			Finish	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb A	tar A	Apr A	day .	lun J	ul	Aug	Sep	Oct	Nov De	
1	Kick-Off Meeting	4/13/2009	4/17/2009				1																				
2	Monthly Oversight Meetings	5/20/2009	1/29/2010																								
3	Research and Reconnaissance	4/20/2009	6/19/2009																								
4	Detail Schedule of Tasks / Refined Focus Areas	4/20/2009	7/10/2009]																	
5	Chapter Outline	6/22/2009	8/21/2009									- 1.															
6	Content Development	7/13/2009	11/20/2009								936																
7	Chapter(s) Review / Revisions	11/23/2009	12/31/2009																								
8	Chapter(s) Approved for Publishing	1/20/2010	1/20/2010													•							2				

IDM Rewrite Implementation Plan April 14, 2009

Robert Tally, Division Administr

FHWA Indiana Division

This document serves as the initial IDM Rewrite Implementation Plan which represents as the roadmap to successful completion and will serve as the benchmark against progress. This implementation plan will be reviewed each month during the Steering Committee Monthly Meetings to track progress against the benchmarks within this document. If a significant revision becomes necessary due to unforeseen scope or schedule changes, the Steering Committee chair will request a formal change.

Submitted by:

Gary Mroczka, Steering Committee Chair
Director, Production Management Division, INDOT

Approved by:

Jim Poturalski, Deputy Commissioner
Highway Management, INDOT

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